

**IN THE SPECIFICATION:**

Please replace the paragraph beginning at page 2, line 7, with the following:

When the water wettability of the support is too low, ink attaches on the non-image areas during printing and a stain is generated on a blanket cylinder, then a so-called scum develops on a print. When the water receptivity of the support is too low, ~~much a~~ significant amount of fountain solution is needed to prevent clogging on shadow areas during printing. Therefore, a so-called water range becomes narrow.

Please replace the paragraph beginning at page 5, line 7, with the following:

Moreover, a support comprising a double structure of small and large pits, in which an average opening diameter of a larger pit with uniformity is 3 m or more and 6 m or less, an average opening diameter of a small pit is 0.2  $\mu$ m or more and 0.8  $\mu$ m or less, and a ratio of depth to the opening diameter of the small pit is not more than 0.2  $\mu$ m, has been proposed in JP-A-11-184074. Here, it is described that the support could improve dot gain with high definition, resistance to stain developing on a blanket, scum resistance under small water volume and printability on UPO YUPO paper. Although the method described in the foregoing gazette could provide better fine control of water volume, further improvements in restraining the dot residual layers are desired.

Please replace the paragraph beginning at page 7, line 7, with the following:

When the photosensitive layer that can become alkali-soluble by heating sustains damage by some causes, the area to be an image area also becomes easily soluble in developer. That is, the printing plate sustains damage easily in practical use. For this reason, scratch-like non-image portions is generated by tiny contact to the plate surface such as bumping as bumping in handling the printing plate, tiny abrasion in interleaving sheets and contact to the plate surface by fingers. Accordingly, handling of the printing plate is very difficult under the present circumstance.

Please replace the paragraph beginning at page 18, line 19, with the following:

Preferably, Preferably, for the surface of said support, an 85-degree surface gloss regulated by JIS Z8741-1997 is set equal to 30 or lower.

Please replace the paragraph beginning at page 39, line 12, with the following:

When the amount of alkali etching is less than  $0.5\text{g}/\text{m}^2$ , convex portions on the surface of the support formed by graining are kept in a sharp shape. The thinner portions of the photosensitive layer formed on these sharp convex portions are around  $0.1\text{ }\mu\text{m}$  or less. In the case of the thinner photosensitive layer on the convex portions, if the sensitivity of the developer is high, the developer erodes the photosensitive layer and reaches easily the intermediate layer readily soluble soluble in alkali. As a result, the intermediate layer is dissolved and the photosensitive layer is removed and non-image

*(15)*  
portions are generated easily on the area which should be an image area originally. That is, the thickness decreasing easily occurs, causing the inadequate inking sometimes.

Please replace the paragraph beginning at page 55, line 5, with the following:

*(16)*  
Abrasives used in the present invention may be publicly known ones. For example, abrasives such as pamiston pumice, silica sand, aluminum hydroxide, alumina powder, volcanic ash, Carborundum, emery and their combination may be used. Among them, abrasives having average particle size of 5 to 150 m and specific gravity of 1.05 to 1.3 are preferable.

Please replace the paragraph beginning at page 99, line 2, with the following:

*(17)*  
In a monomer having an acid group, preferably, A represents -COO- or -CONH-, and B represents a phenylene group or a substituted phenylene group where the substituent substituent is a hydroxy group, a halogen atom or an alkyl group. D and E represent independently an alkylene group or a divalent combination group that is expressed with molecular formulas  $C_nH_{2n}O$ ,  $C_nH_{2n}S$  or  $C_nH_{2n+1}N$ , respectively. G represents a trivalent combination group that is expressed with molecular formulas  $C_nH_{2n-1}$ ,  $C_nH_{2n-1}O$ ,  $C_nH_{2n-1}S$  or  $C_nH_{2n}N$ . Provided, that n represents an integer of 1 - 12. X and X' represent independently a carboxylic acid, sulfonic acid, phosphonic acid, a sulfuric monoester or a phosphoric monoester phosphorate, respectively.  $R_1$  represents a hydrogen atom or an alkyl group. Reference codes a, b, d and e represent independently 0 or 1 respectively, but a and b are not 0 at the same time.

Please replace the paragraph beginning at page 105, line 8, with the following:

*Q8*  
In monomers having onium groups, more preferably, J represents -COO- or -CONH-, and K represents a phenylene group or a substituted phenylene group where the substituent substituent is a hydroxy group, a halogen atom or an alkyl group. M represents an alkylene group or a divalent combination group that is expressed with molecular formulas  $C_nH_{2n}O$ ,  $C_nH_{2n}S$  or  $C_nH_{2n+1}N$ . Provided, that n represents an integer of 1 to 12.  $Y_1$  represents a nitrogen atom or a phosphorus atom and  $Y_2$  represents a sulfur atom.  $Z^-$  represents a halogen ion,  $PF_6^-$ ,  $BF_4^-$  or  $R_8SO_3^-$ .  $R_2$  represents a hydrogen atom or an alkyl group.  $R_3$ ,  $R_4$ ,  $R_5$  and  $R_7$  represent independently a hydrogen atom or, an alkyl group, an aromatic group or an aralkyl group of 1 to 10 carbon atoms that may be bonded with substituents if circumstances require, respectively, and  $R_6$  represents an alkylidyne or an substituted alkylidyne of 1 to 10 carbon atoms.  $R_3$  and  $R_4$ , and,  $R_6$  and  $R_7$  may form a ring respectively by bonding to each other. Reference codes j, k and m represent independently 0 or 1 respectively, however, j and k are not 0 at the same time.  $R_8$  represents an alkyl group, an aromatic group or an aralkyl group of 1 to 10 carbon atoms that may be bonded with substituents.

Please replace the paragraph beginning at page 106, line 10, with the following:

*Q9*  
Among monomers having onium groups, more preferably K represents a phenylene group or a substituted phenylene group where the substituent substituent is a hydrogen atom or an alkyl group of 1 to 3 carbon atoms. M represents an alkylene group of 1 to 2 carbon atoms or an alkylene group of 1 to 2 carbon atoms combined with an oxygen atom.

*a9* Z<sup>-</sup> represents a chlorine ion or R<sub>8</sub>SO<sub>3</sub><sup>-</sup>. R<sub>2</sub> represents a hydrogen atom or a methyl group.

The reference code j is 0 and k is 1. R<sub>8</sub> represents an alkyl group of 1 to 3 carbon atoms.

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Please replace the paragraph beginning at page 110, line 15, with the following:

*a10* (1) Acrylamides, methacrylamides, acrylic esters, methacrylic esters ~~metharylates~~ methacrylates and hydroxystyrenes such as N-(4-hydroxyphenyl) acrylamide, N-(4-hydroxyphenyl) methacrylamide; o-, m- or p-hydroxystyrene, o- or m-bromo-p-hydroxystyrene, o- or m-chloro-p-hydroxystyrene and o-, m- or p-hydroxyphenyl acrylate or methacrylate;

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Please replace the paragraph beginning at page 113, line 17, with the following:

*a11* (10) vinyl esters such as vinyl acetate, vinyl chloroacetate, vinyl ~~butylate~~ butyrate and vinyl benzoate;

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Please replace the paragraph beginning at page 131, line 12, with the following:

*a12* Description will be made below for the compound represented by the general formula (6) shown above. Preferably, the number of carbon atoms of the arylene group denoted by the code R<sub>1</sub> is 6 to 14, more preferably, 6 to 10. Concrete examples of the arylene group represented by the code R<sub>1</sub> include a phenylene group, a naphthyl group, an anthryl group and a phenanthryl group. The arylene group denoted by the code R<sub>1</sub> may be substituted for an alkyl group having 1 to 10 carbon atoms, an alkenyl group having 2 to 10 carbon atoms, an alkynyl group having 2 to 10 carbon atoms, an aryl group

having 6 to 10 carbon atoms, a carboxylic ester group, an alkoxy group, a phenoxy group, a surfurie sulfuric ester group, a phosphonic ester group, a sulfonyl amide group, a nitro group, a nitrile group, an amino group, a hydroxy group a halogen atom, an ethylene oxide group, a propylene oxide group, a triethyl ammonium chloride group or the like.

*(12)*  
Please replace the paragraph beginning at page 134, line 15, with the following:

*(13)*  
pH of the foregoing solution can be adjusted so that the solution can be used in a pH ranging from 0 to 12, preferably from 0 to 6, with a basic substance such as ammonia, triethylamine, potassium hydroxide, inorganic acid such as hydrochloric acid, phosphoric acid, sulfuric acid and nitric acid, various organic acidic substances including organic sulfonic acid such as nitrobenzene sulfonic acid and naphthalene sulfonic acid, organic phosphonic acid such as phenylphosphonic acid, organic carbonic acid such as benzoic acid, coumaric acid and malic acid, and organic chloride such as naphthalenesulfonyl chloride and benzenesulfonyl chloride.

*(14)*  
Please replace the paragraph beginning at page 140, line 15, with the following:

Besides the above, as the high-molecular compound containing the phenolic hydroxy group, a high-molecular compound containing the phenolic hydroxy group in a side chain thereof can be preferably used. As the high-molecular compound containing the phenolic hydroxy group in the side chain, exemplified is a high-molecular compound obtained by homopolymerizing polymeric monomers made of low-molecular compounds which contains

*a 14*  
at least one phenolic phenolic hydroxy group and at least one polymerizable unsaturated bond or by copolymerizing another polymeric monomer with the concerned monomers.

Please replace the paragraph beginning at page 149, line 2, with the following:

*a 15*  
(3) Alkyl methacrylates such as methyl methacrylate, ethyl methacrylate, propyl methacrylate, butyl methacrylate, amyl methacrylate, hexyl ~~methacrylate~~ methacrylate, cyclohexyl methacrylate, benzyl methacrylate, 2-chloroethyl methacrylate, glycidyl methacrylate and N-dimethylaminoethyl methacrylate.

Please replace the paragraph beginning at page 149, line 15, with the following:

*a 16*  
(6) Vinyl esters such as vinyl acetate, vinyl chloroacetate, vinyl ~~butylate~~ butyrate and vinyl benzoate.

Please replace the paragraph beginning at page 157, line 2, with the following:

*a 17*  
As a method of dispersing the above-described pigments, a well-known dispersing technology for use in preparing ink, toner and the like can be used. Examples of the dispersing machine include an ultrasonic dispersing machine, a sandmill, an attritor attritor, a pearl mill, a super mill, a ball mill, an impeller, a disperser, a KD mill, a colloid mill, a dynatron, a three-roll mill and a pressurizing kneader. Details thereof are described in "Latest Pigment Application Technology (Saishin Ganryo Oyo Gijyutsu)" (CMC, 1986).

Please replace the paragraph beginning at page 163, line 11, with the following:

Each of reference codes  $R_5$  to  $R_{10}$  independently denotes an alkyl group which has 1 to 12 carbon atoms and may contain a substituent. Here, specific examples of  $R_5$  to  $R_{10}$  include a methyl group, an ethyl group, a phenyl group, a dodecyl group, a ~~naphthyl~~<sup>Al</sup> ~~naphthyl~~ group, a vinyl group, an allyl group, and a cyclohexyl group. In the case where these groups contain substituents, examples of the substituents include a halogen atom, a carbonyl group, a nitro group, a nitrile group, a sulfonyl group, a carboxy group, carboxylic ester, and sulfonic ester.

Please replace the paragraph beginning at page 169, line 16, with the following:

Al<sup>9</sup> Examples of the phenols include bisphenol A, p-nitrophenol, p-ethoxyphenol, 2,4,4'-trihydroxy benzophenone, 2,3,4-trihydroxy benzophenone, 4-hydroxy ~~benzopenone~~ ~~benzophenone~~, 4,4',4''-trihydroxy triphenylmethane, 4,4',3'',4''-tetrahydroxy-3,5,3',5'-tetramethyl triphenylmethane.

Please replace the paragraph beginning at page 170, line 1, with the following:

Al<sup>20</sup> Examples of the organic acids include sulfonic acids, sulfinic acids, alkyl sulfuric acids, phosphonic acids, phosphoric esters and carboxylic acids, which are described in the gazettes of JP-A-60-88942 and JP-A-2-96755. Specific examples include p-toluenesulfonic acid, dodecylbenzenesulfonic acid, p-toluenesulfinic acid, ethylsulfuric acid, phenylphosphonic acid, phenylphosphinic acid, phenyl phosphate, diphenyl phosphate, benzoic acid, isophthalic acid, adipic acid, p-toluic acid, 3,4-dimethoxy benzoic acid, phthalic acid, ~~terephthalic~~ terephthalic acid, 4-cyclohexene-1,2-dicarboxylic acid, erucic

(J20) acid, lauric acid, n-undecanoic acid, ascorbic acid, bis(hydroxyphenyl)sulfone  
bis(hydroxyphenyl)sulfone, methyl phenyl sulfone and diphenyl disulfone.

Please replace the paragraph beginning at page 173, line 19, with the following:

As occasion demands, plasticizer is added into the photosensitive composition used for the present invention for the purpose of providing a coating layer with flexibility.

(J21) Examples include butyl phthalyl, polyethylene glycol, tributyl citrate, diethyl phthalate, dibutyl phthalate, dihexyl phthalate, dioctyl phthalate, tricresyl phosphate, tributyl phosphate, trioctyl phosphate, tetrahydrofurfuryl oleate, and acrylic or methacrylic acid oligomer or polymer.

Please replace the paragraph beginning at page 187, line 9, with the following:

• tetrahydrophthalic tetrahydrophthalic anhydride 0.03 g

Please replace the paragraph beginning at page 187, line 15, with the following:

(J22) • fluorine-containing surfactant (Megafac Megafac F177, by Dainippon Ink and Chemicals Inc.) 0.05 g

Please replace the paragraph beginning at page 188, line 6, with the following:

(J23) Methacrylic acid 31.0 g (0.36 mol), ethyl chloroformate 39.1 g (0.36 mol) and acetonitrile 200 mL were put in a 500 mL-capacity three-neck flask having an agitator, a cooling pipe and a dropping funnel, and a mixture was agitated while ~~being~~ being cooled

*Q23*  
in an ice-water bath. Triethylamine 36.4 g (0.36 mol) was dropped to this mixture with the dropping funnel for about 1 hour. After the end of the dropping, the ice-water bath was removed and the mixture was agitated at a room temperature for 30 min.

Please replace the paragraph beginning at page 193, line 2, with the following:

*Q24*  
First, the developer was exhausted by carbon dioxide gas to reduce electric conductivity on 2 mS/cm scale, and the electrical conductivity causing visible residual layers to be formed on non-image areas of the printing plate was set as a lower limit value.

Please replace the paragraph beginning at page 241, line 7, with the following:

*Q25*  
Photosensitive solution components: ester compound of 1, 2-diazonaphthoquinone-5-sulfonyl chloride and pyrogallol-acetone resin (described in Example 1 of specification of US Patent No. 3,635,709) 0.45 g, cresol-formaldehyde novolak resin (meta/para ratio: 6/4; weight-average molecular weight: 3,000; number-average molecular weight: 1,100; unreacted cresol content: 0.7 wt%) 1.1 g, m-cresol-formaldehyde novolak resin (weight-average molecular weight: 1,700; number-average molecular weight: 600; unreacted cresol content: 1 wt%) 0.3 g, poly[N-(p-aminosulfonylphenyl)acrylamide-co-normalbutylacrylate-co-diethyleneglycol monomethyl ether methacrylate] (described in the specification of Japanese Patent Application No. 3-311241 (gazette of JP-A-5-150453); mol ratio of various monomers monomers in order: 40:40:20; weight-average molecular weight: 40,000; number-average molecular weight: 20,000) 0.02 g, p-normaloctylphenol-formaldehyde resin (described in

US Patent No. 4,123,279) 0.02 g, naphtoquinone-1,2-diazide-4-sulfonyl chloride 0.01 g, tetrahydrophthalic anhydride 0.1 g, benzoic acid 0.02 g, 4-[p-N,N-bis(ethoxycarbonylmethyl)aminophenyl]-2,6-bis(trichloromethyl)-S-triazine 0.01 g, 4-[p-N-(p-hydroxybenzoyl)aminophenyl]-2,6-bis(trichloromethyl)-S-triazine 0.02 g, 2-trichloromethyl-5-(4-hydroxystyryl)-1,3,4-oxadiazole 0.01 g, dye 0.02 g obtained by changing a counter anion of Victorian pure blue BOH into 1-naphthalenesulfonic acid, Modipar F-200 (fluorine-containing surfactant by NOF Corp., 30 wt% mixed solvent solution of methyl ethyl ketone and methyl isobutyl ketone) 0.06 g, ~~Megaface~~ Megafac F177 (fluorine-containing surfactant by Dai Nippon Ink and Chemicals Inc., methyl isobutyl ketone solution of 20 wt%) 0.02 g, methyl ethyl ketone 15 g, and 1-methoxy-2-propanol 10 g.

Please replace the paragraph beginning at page 244, line 12, with the following:

Photosensitive solution components: polyurethane resin (A) 5g obtained by a method described below, dodecyl benzene sulfonate 1.2 g of a condensate of 4-diazophenylamine and ~~formaldehyde~~ formaldehyde, propane-1,2,3-tricarboxilic acid 0.05 g, phosphoric acid 0.05 g, 4-sulfophthalic acid 0.05 g, tricresyl phosphate 0.25 g, half ester 0.1 g by n-hexanol of styrene-maleic anhydride copolymer, dye 0.18 g obtained by changing a counter anion of Victorian pure blue BOH into 1-naphthalene sulfonic acid, compound 0.015 g represented by  $[C_6F_{17}CH_2CH_2O]_{1.7}PO[OH]_{1.3}$ , ~~Megaface~~ Megafac F177 ~~fluororaine~~ fluorine-containing surfactant by Dai Nippon Ink and Chemicals Inc., methyl

isobutyl ketone solution of 20 wt%) 0.06 g, 1-methoxy-2-propanol 20 g, methanol 40 g,  
*(A26)* methyl ethyl ketone 40 g, and ion-exchange water 1g.

*(A27)* Please replace the paragraph beginning at page 245, line 8, with the following:

2,2-bis(hydroxymethyl)propionic acid 11.5 g (0.0860 mol), diethylene glycol 7.26 g (0.0684 mol) and 1,4-butanediol 4.11 g (0.0456 mol) were poured into a 500 mL-capacity three-neck round-bottom flask having a condenser and an agitator, and dissolved in N,N-dimethylacetamide dimethylacetamide 118 g. Then, 4,4'-diphenyl methane diisocyanate 30.8 g (0.123 mol), hexamethylene diisocyanate 13.8 g (0.0819 mol) and di-n-butyl tin diraulate dilaurate 0.1 g as a catalyst were added, and 7-hour heating was carried out at 90C under agitation. N,N-dimethylacetamide 100 mL, methanol 50 mL and acetic acid 50 mL were added to the obtained reaction solution. After agitation, the solution was poured into water 4L while being agitated, and white polymer was deposited. This polymer was filtered, washed by water, and dried under a reduced pressure.

Accordingly, 62 g of polymer (polyurethane resin (A)) was obtained.

(3) An intermediate layer and a photosensitive layer were formed on the surface of the support for a lithographic printing plate, obtained in Example B-6 in the process described below, and then a presensitized plate (negative working PS plate having alkali-solubility increased by photothermal conversion) having a coating amount after drying set at 2.0 g/m<sup>2</sup> was prepared.

Please replace the paragraph beginning at page 247, line 4, with the following:

078  
Photosensitive solution components: nonylphenol 0.05 g, 2,4,6-trimethoxy diazonium-2,6-dimethylbenzene sulfonate 0.3 g, crosslinking agent (B) 0.5 g obtained by a method described below, poly(p-hydroxystyrene) Marukalinker MS-4 (by Maruzen Petrochemical Co., Ltd.) 1.5 g, 2,6 dimethylene-(4,5-naphthalene-1,3,3-trimethyl pyrrol)-4-monochrolo monochloro-5,6-propane-hepten-methyl benzene sulphonate (cyanine dyestuff) 0.07 g, Izenspiron Blue C-RH (by Hodogaya Chemical Co. Ltd.) 0.035 g, Megaface Megafac F177 (Dai Nippon Ink and Chemicals Inc., fluorine-containing surfactant, methyl isobutyl ketone solution of 20 wt%) 0.01 g, methyl ethyl ketone 12 g, methyl alcohol 10 g, and 1-methoxy-2-propanol 8 g.

079  
Please replace the paragraph beginning at page 249, line 13, with the following:

Photosensitive solution components: an alkali-soluble high-molecular compound (C) 0.7 g obtained by a method described below, 2,6-dimethylene-(4,-5-naphthalene-1,3,3-trimethyl pyrrol)-4-monochrolo monochloro-5,6-propane-hepten-methyl benzene sulphonate (cyanine dyestuff) 0.1 g, tetrahydrophthalic anhydride 0.05 g, p-toluene sulfonic acid 0.002 g, dye 0.02 g obtained by changing a counter anion of Victorian pure blue BOH into 1-naphthalenesulfonic acid anion, Megaface Megafac F177 (fluorine-containing surfactant by Dai Nippon Ink and Chemicals Inc., methyl isobutyl ketone solution of 20 wt%) 0.05 g,  $\gamma$ -butyl lactone  $\gamma$ -butyrolactone 8 g, methyl ethyl ketone 8g, and 1-methoxy-2-propanol 4 g.

Please replace the paragraph beginning at page 254, line 8, with the following:

*Q30*  
Alkali developer 1 components: sodium hydroxide 2.8 wt%, silicon dioxide 2.0 wt%, nonionic surfactant (Plronic (Pluronic PE-3100, by BASF Co., Ltd.) 0.5 wt%, and water 94.7 wt%.

Please replace the paragraph beginning at page 254, line 11, with the following:

*Q31*  
Alkali developer 2 components: potassium hydroxide 2.8 wt%, D-sorbitol 2.5 wt%, pentasodium diethylenetriaminopenta(methylene)phosphonate diethylenetriaminepenta(methylene)phosphonate 0.1 wt%, nonionic surfactant (Plronic (Pluronic P-85, by Asahi Denka Kogyo K. K.) 0.1 wt%, and water 94.5 wt%.

Please replace the paragraph beginning at page 258, line 1, with the following:

Table B-1

*AB2*

			Example			
			B-1	B-2	B-3	B-4
(a)	State of rolled aluminum	Aspect ratio	1.1	1.3	1.1	1.1
		Aluminum material	JIS A3005	JIS A3005	JIS A1050	JIS A1050
(b)	Mechanical graining	Brush bristle diameter(mm)	0.3	0.48	0.3	0.48
(c)	Chemical etching	Dissolving amount (g/m <sup>2</sup> )	5	5	3	4
(d)	Desmutting	Processing time (sec)	10	10	10	10
(e)	Preparatory electrochemical graining	Quantity of <u>electricity</u> <u>electricity</u> (C/dm <sup>2</sup> )	200	100	100	100
		Solution type	nitric acid 1 wt%	hydro-chloric acid 1 wt%	nitric acid 1 wt%	nitric acid 1 wt%
		Solution temperature (°C)	50	35	50	50
(f)	Chemical etching	Dissolving amount (g/m <sup>2</sup> )	5.0	0.3	1.7	0.2
(g)	Desmutting	Processing time (sec)	10	10	10	10
(h)	Electrochemical graining	Quatity of electricity (C/dm <sup>2</sup> )	240	240	-	-
		Solution type	nitric acid 1 wt%	nitric acid 1 wt%	-	-
		Solution temperature (°C)	50	50	-	-
(i)	Chemical etching	Dissolving amount (g/m <sup>2</sup> )	0.1	0.1	-	-

*Q32*

(j)	Desmutting	Processing time (sec)	10	10	-	-
(k)	Anodizing	Amount of anodized layer (g/m <sup>2</sup> )	1.8	1.8	1.8	1.2
Physical property value	R <sub>a</sub> (m)		0.38	0.36	0.43	0.45
	R <sub>z</sub> (m)		3.63	3.86	3.69	4.20
	P <sub>c</sub> (0.3-0.3) (number/mm)		26	17	30	27
	85-degree surface gloss		17.7	29	29.6	28.1
Printing evaluation	Adjustment easiness of amount of fountain solution on plate		A	A-B	A-B	A-B
	Resistance to interlocking of halftone dots when fountain solution is reduced		A-B	A	A-B	A-B
	Local residual layers on non-image areas		A	A	A	A

Evaluation A: Excellent B: Good C: Failed

*Q33*  
 Please replace the paragraph beginning at page 259, line 1, with the following:

Table B-2

			Example			Comparative Example	
			B-5	B-6	B-7	B-1	B-2
(a)	State of rolled aluminum	Aspect ratio	1.1	1.1	1.1	1.1	1.1
		Aluminum material	JIS A3005	JIS A3005	JIS A3005	JIS A1050	JIS A1050
(b)	Mechanical graining	Brush bristle diameter (mm)	-	-	-	-	-
(c)	Chemical etching	Dissolving amount (g/m <sup>2</sup> )	5	5	5	5	5
(d)	Desmutting	Processing time (sec)	10	10	10	10	10

*(13)*

(e)	Preparatory electrochemical graining	Quantity of <u>electricity</u> <u>electricity</u> (C/dm <sup>2</sup> )	200	200	200	270	300
		Solution type	nitric acid 1 wt%				
		Solution temperature (°C)	50	50	50	50	50
(d)	Chemical etching	Dissolving amount (g/m <sup>2</sup> )	5.0	5.0	5.0	0.2	0.1
(g)	Desmutting	Processing time (sec)	10	10	10	10	10
(h)	<u>Electrochemical</u> <u>Electrochemical</u> graining	Quantity of electricity (C/dm <sup>2</sup> )	240	240	240	-	-
		Solution type	nitric acid 1 wt%	nitric acid 1 wt%	nitric acid 1 wt%	-	-
		Solution temperature (°C)	50	50	50	-	-
(i)	Chemical etching	Dissolving amount (g/m <sup>2</sup> )	0.1	0.1	0.1	-	-
(j)	Desmutting	Processing time (sec)	10	10	10	-	-
(k)	Anodizing	Amount of anodized layer (g/m <sup>2</sup> )	1.8	1.8	1.8	2.7	1.8
Physical property value	$R_a$ (μm)		0.38	0.38	0.38	0.27	0.32
	$R_z$ (μm)		3.63	3.63	3.63	2.96	3.63
	$P_c(0.3-0.3)$ (number/mm)		26	26	26	19	18
	85-degree surface gloss		17.7	29	29.6	28.1	35.7

Q33

Printing evaluation	Adjustment easiness of amount of fountain solution on plate	A	A	A	B-C	C
	Resistance to interlocking of halftone dots when fountain solution is reduced	A-B	A-B	A-B	C	C
	Local residual layers on non-image areas	A	A	A	A	B-C
	Overall evaluation	A	A	A	C	C

Evaluation A: Excellent B: Good C: Failed

Please replace the paragraph beginning at page 274, line 20, with the following:

Q34  
Adhesive compound (D) obtained by the method described below was coated by use of a foiler spin coater, and then dried at a temperature of 170C for 10 min, thus forming an adhesive layer. The coating amount after drying was 20 mg/m<sup>2</sup>.

Please replace the paragraph beginning at page 275, line 17, with the following:

Q35  
Component of photosensitive solution: pentaerythritol tetraacrylate 1.5 g, poly(allyl methacrylate/methacrylic acid) copolymer (mol ratio 80/20) 2.0 g, 1,2-(p-styrylphenyl styrylphenyl)-4,6-bis (trichloromethyl)-s-triazine 0.2 g, propylene glycol monomethyl ether 20 g, methyl ethyl ketone 20 g, Megafac Megafac F177 (fluorine-containing surfactant by Dainippon Ink and Chemicals Inc., methyl isobutyl ketone solution of 20 wt%) 0.03 g, and oil-soluble dye (Victorian pure blue BOH) 0.02 g.

Please replace the paragraph beginning at page 281, line 1, with the following:

Table C-2

*Q30*

		Comparative Example					
		C-1	C-2	C-3	C-4	C-5	C-6
State of rolled aluminum	Aluminum material	JIS A3005	JIS A3005	JIS A1050	JIS A1050	JIS A1050	JIS A1050
Mechanical graining	Brush bristle diameter (mm)	-	-	-	-	-	-
Chemical etching	Dissolving amount (g/m <sup>2</sup> )	5	5	5	15	15	5
Desmutting	Processing time (sec)	10	10	10	10	10	10
Preparatory electrochemical graining	Quantity of electricity (C/dm <sup>2</sup> )	100	200	600	400	300	210
	Solution type	hydr-ochl-oric acid 1 wt%	hydr-ochl-oric acid 1 wt%	hydr-ochl-oric acid 1 wt%	nitric acid 2 wt%	nitric acid 2 wt %	nitric acid 1 wt%
	Frequency (Hz)	60	60	60	60	60	60
	Solution temperature (°C)	35	35	60	30	30	50
Waviness chart	Waviness of 0.3 μm or higher (number)	30	46	51	50	53	64
	Waviness of 1.0 μm or higher (number)	0	12	10	2	1	8
Chemical etching	Dissolving amount (g/m <sup>2</sup> )	0.3	0.3	0.3	2	2	1
Desmutting	Processing time (sec)	10	10	10	10	10	10
Electrochemical graining	Quantity of electricity (C/dm <sup>2</sup> )	210	210	-	-	-	-
	Solution type	nitric acid 1 wt%	nitric acid 1 wt%	-	-	-	-
	Solution temperature (°C)	50	50	-	-	-	-
Chemical etching	Dissolving amount (g/m <sup>2</sup> )	0.2	0.2	-	-	-	-
Desmutting	Processing time (sec)	10	10	-	-	-	-

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<u>Anodizing</u> <u>Anodizing</u>		Amount of anodized layer (g/m <sup>2</sup> )	2.7	2.7	2.7	2.7	2.7	2.7
Waviness chart	Waviness of 0.3 $\mu\text{m}$ or higher (number)	35	54	55	50	52	67	
	Waviness of 1.0 $\mu\text{m}$ or higher (number)	0	11	12	1	0	9	
Arithmetic average roughness ( $\mu\text{m}$ )		0.3	0.46	0.56	0.56	0.51	0.53	
85-degree surface gloss		39.1	24.6	24.3	23.5	22.8	25.7	
Printing evaluation	Adjustment easiness of amount of fountain solution on plate	B	A	A-B	B-C	B-C	A-B	
	Resistance of interlocking of halftone dots when fountain solution is reduced	A-B	A-B	A	A	A	A	
	Local residual layer on non-image areas	B-C	C	C	A-B	A-B	C	
	Stain on blanket cylinder	A	B	B-C	B-C	B	B-C	
	Overall evaluation	B	B-C	B-C	B-C	B-C	B-C	

Please replace the paragraph beginning at page 295, line 15, with the following:

*Q37*

A JIS A1050 aluminum plate having a thickness of 0.24 mm was subjected to mechanical graining by rotating roller-like nylon brushes while supplying aqueous suspension containing permiston pumice of 400 mesh to the surface of the aluminum plate. A material of the nylon brush was 610 nylon, having a bristle length of 50 mm and a bristle diameter of 0.295 mm. The nylon brush was made by boring holes in the stainless cylinder of  $\phi$  300 mm and densely planting bristles therein. Three rotary brushes were used. Each distance between two supporting rollers ( $\phi$  200 mm) in the lower part of the brush was 300 mm. Each brush roller was pressed until a load of a driving motor for pressing the brush reached plus 7 kW for the load before the brush roller was pressed to the

aluminum plate. The rotating direction of each brush was the same as the moving direction  
of the aluminum plate.

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